

The National Centre for e-Social Science

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Background

- Importance of e-science & grid computing has been recognised (by ESRC) since 2002
 - e-Social Science demonstrators (Leeds & Manchester), 2002/03
 - e-Social Science demonstrators (round 2) – including Leeds and Sheffield, 2003/04
 - National Centre (NCeSS) – hub (Manchester) and nodes (Leeds, Bristol, Nottingham, Lancaster++): 2004 onwards

e-Social Science Demonstrators

- An Investigation of Disclosure Issues Posed by the Grid
- Informing Business/Regional Policy: Grid Fusion of Global Data and Local Knowledge (INWA)
- FINGRID: Financial INformation GRID
- SABRE in R: An OGSA Component-Based Approach to Middleware for Statistical Modelling
- Grid-Enabled Micro-Econometric Data Analysis
- **Hydra II Grid Based Spatial Planning Services**
- VIDGRID: Distributed Video Analysis With Grid Technologies
- **Collaborative Analysis of Offenders' Personal and Area-Based Social Exclusion**
- Pilot Semantic Grid Service for Environmental Modelling
- CONVERTGRID
- Genealogies of Knowledge-Developing Anthropological Middleware to Support Fieldwork-Based Social Science

Hydra

- First generation grid-enabled spatial decision support system, using health care scenarios
- Combines virtual database access with spatial mapping, modelling and optimisation tools within a secure open grid services architecture (Globus 3)
- ESRC demonstrator project under the direction of Birkin and Peter Dew

Hydra - Example

HYDRA Health Care Planning Support System | University of Leeds, 2004

Help

Services in the County of: Buckinghamshire
Location: District of: Aylesbury Vale

Security

Seamless virtual data access

code	x	y
3213	474100	208800
3214	473300	208500
3215	474600	216700
3216	469500	208700
3217	469500	208400
3218	463900	211500
3219	465200	213800
3220	465200	213800
3221	480390	214820
3222	483500	213900
3223	484000	213400
3224	481900	213700
3225	482500	214800
3226	482100	213400
3227	481200	212000
3228	479800	221000
3229	486800	218900
3230	488800	211700

Collaboration

Choose Model Parameters:
(a) Select age ranges:
Minimum Female Age: 75 Maximum Female Age: 90
Minimum Male Age: 90

(b) Enter Minimum and Maximum number of surgeries:
Minimum: 3 Maximum: 6

3. Select year for model run:
 1991 2001 2011 2021

4. Enter 'run' name to save current input choices:

Here are your results.
You can see the number of surgeries for each location.

Modelling services & HPC

5. Click button below to view summary info

If you would like to change past model inputs, choose a past model run from list:
test aylesbury
aylesbury future

Nodes Summary

- Understanding New Forms of Digital Record for e-Social Science:
 - Extending Grid based technologies to provide new processes and services through which social science data may be collected, collated, and distributed
- Collaboration for Quantitative e-Social Science Statistics (CQeSS):
 - Developing e-science tools appropriate to quantitative e-social science

Nodes Summary

- Modelling and Simulation for e-social Science (MoSeS):
 - Generic frameworks through which grid-enabled modelling and simulation might be exploited within a wide range of social science problem domains
- Mixed Media Grid:
 - Tools and techniques for social scientists to collaboratively analyse audio-visual qualitative data and related materials over the Grid

Research Strands

- Applications:
 - Substantive social science research problems
 - Enhancing existing areas of research and defining new ones
- Social shaping:
 - Influences on the design, development, uptake and use of Grid technologies
 - Socio-economic impact

Next Steps

- Up to four further nodes
- Small project grants (til July)
- AGN funding
- But major focus is now on substantive research applications, dissemination, and community-building
 - First International Conference on e-Social Science, University of Manchester, June 22-24

Further Information

- www.informatics.leeds.ac.uk/hydra
- m.h.birkin@leeds.ac.uk
- www.ncess.ac.uk